



Water-Data Report 2007

12113347 MILL CREEK AT EARTHWORKS PARK, AT KENT, WA

Puget Sound Basin
Duwamish Subbasin

LOCATION.--Lat 47°23'00", long 122°13'25" referenced to North American Datum of 1927, in SW ¼ NW ¼ sec.19, T.22 N., R.5 E., King County, WA, Hydrologic Unit 17110013, at control-manhole of flood-detention basin in Earthworks Park, 250 ft upstream from Titus St., and 0.6 mi east of Kent City Hall.

DRAINAGE AREA.--2.49 mi².

SURFACE-WATER RECORDS

PERIOD OF RECORD.--January 1994 to current year.

GAGE.--Water-stage recorder and crest-stage gage. Datum of gage is NGVD of 1929 (City of Kent benchmark).

REMARKS.--Records poor. Natural flow affected by urbanization and construction of flood-control catchments. U.S. Geological Survey satellite telemeter at station.

AVERAGE DISCHARGE FOR PERIOD OF RECORD.--13 years (water year 1995-2007), 3.86 ft³/s, 21.05 in/yr, 2,800 acre-ft/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, not determined Feb. 9, 1996, elevation, 47.52 ft, affected by backwater from debris caught on downstream culvert grates; maximum elevation, 48.05 ft, May 13, 1996, affected by backwater from debris caught on downstream culvert grates; minimum discharge, 0.31 ft³/s, July 5, 1995, Aug. 12, 1997, but may have been lower during periods of culvert maintenance.

EXTREMES FOR CURRENT YEAR.--Maximum discharge and gage height unknown. Maximum daily discharge 90 ft³/s, Nov. 6; minimum daily discharge, 0.63 ft³/s, Aug. 13.

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DISCHARGE, CUBIC FEET PER SECOND
WATER YEAR OCTOBER 2006 TO SEPTEMBER 2007
DAILY MEAN VALUES
[*e*, estimated]

Day	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
1	0.79	0.94	4.4	4.8	1.6	4.2	3.5	2.3	1.4	1.4	0.78	1.0
2	0.80	4.4	3.1	27	1.6	5.2	3.0	4.3	1.4	1.1	0.79	1.0
3	0.81	9.5	2.6	20	1.8	5.9	2.8	2.3	1.3	1.1	0.78	1.1
4	0.79	e11	2.6	16	3.1	3.8	2.6	2.2	1.4	1.1	0.74	4.2
5	0.78	e15	2.2	19	1.8	3.9	2.5	2.7	1.4	1.0	0.76	1.4
6	0.80	e90	1.9	17	1.7	3.2	2.4	1.8	1.4	1.00	0.73	1.2
7	0.77	48	1.8	23	1.8	4.1	2.5	1.8	1.7	1.00	0.72	1.1
8	0.78	19	1.8	16	2.5	4.4	4.1	1.6	1.4	0.96	0.70	1.1
9	0.76	15	2.8	13	2.2	3.6	4.2	1.5	2.5	0.95	0.69	1.1
10	0.75	15	4.1	10	2.2	5.4	2.8	1.5	1.7	0.95	e0.82	e1.1
11	0.75	13	11	8.7	4.3	12	2.5	1.5	1.4	0.94	0.82	e1.0
12	0.76	19	12	6.5	2.5	13	2.3	1.4	1.3	0.93	0.82	1.0
13	0.76	18	13	4.2	1.9	6.8	2.7	1.4	1.3	1.2	0.63	1.1
14	0.78	12	20	3.1	2.5	4.7	2.5	1.5	1.3	0.92	0.75	1.1
15	3.6	11	15	2.7	3.6	3.7	2.1	1.5	1.8	0.90	0.77	1.0
16	1.3	7.9	11	2.6	2.1	3.4	2.1	1.4	1.3	0.89	0.76	1.1
17	0.85	5.5	8.4	3.1	2.8	4.3	2.3	1.4	1.3	0.89	0.75	2.5
18	2.0	3.7	5.0	5.4	3.0	4.1	2.1	1.5	1.2	1.9	1.3	1.1
19	3.9	6.0	3.5	5.3	6.1	6.8	2.1	1.5	1.2	2.4	3.5	1.0
20	1.3	6.2	3.6	4.7	15	7.9	1.9	3.0	1.2	3.8	1.4	1.0
21	0.92	e13	10	3.3	8.1	4.2	1.9	3.6	1.2	2.5	2.7	1.1
22	0.90	e11	7.6	2.8	6.2	4.3	2.0	3.9	1.1	3.2	1.1	1.0
23	0.86	e13	11	2.6	4.1	4.8	1.8	2.0	1.1	1.7	0.93	1.00
24	0.86	e9.0	11	e2.4	8.0	15	2.4	1.7	2.8	1.1	0.88	0.97
25	0.85	e8.0	11	e2.2	6.5	13	2.0	1.6	1.5	0.92	1.4	1.0
26	0.85	e9.0	14	e2.1	6.7	8.3	1.8	1.5	1.1	0.88	1.2	1.0
27	0.85	e8.0	19	e2.0	5.3	7.3	1.8	1.7	1.1	0.87	0.97	1.2
28	0.85	e6.5	13	e1.9	5.9	4.9	1.7	1.5	1.6	0.86	0.96	2.8
29	1.6	e5.5	10	e1.8	---	4.0	1.7	1.5	4.8	0.83	0.96	1.1
30	0.86	8.0	7.0	1.7	---	3.8	1.7	1.4	2.4	0.82	0.98	7.0
31	0.90	---	4.1	1.7	---	5.2	---	1.4	---	0.82	1.00	---
Total	34.13	421.14	247.5	236.6	114.9	185.2	71.8	59.9	47.6	39.83	32.09	44.37
Mean	1.10	14.0	7.98	7.63	4.10	5.97	2.39	1.93	1.59	1.28	1.04	1.48
Max	3.9	90	20	27	15	15	4.2	4.3	4.8	3.8	3.5	7.0
Min	0.75	0.94	1.8	1.7	1.6	3.2	1.7	1.4	1.1	0.82	0.63	0.97
Ac-ft	68	835	491	469	228	367	142	119	94	79	64	88
Cfsm	0.44	5.64	3.21	3.07	1.65	2.40	0.96	0.78	0.64	0.52	0.42	0.59
In.	0.51	6.29	3.70	3.53	1.72	2.77	1.07	0.89	0.71	0.60	0.48	0.66

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1994 - 2007, BY WATER YEAR (WY)

	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
Mean	2.13	7.03	7.43	8.43	6.24	4.68	3.11	2.05	1.69	1.07	1.04	1.18
Max	4.44	14.0	12.6	15.1	20.0	8.34	8.03	3.09	3.45	1.66	1.60	2.00
(WY)	(1998)	(2007)	(1996)	(1997)	(1996)	(1999)	(1996)	(1996)	(1997)	(1997)	(2004)	(2004)
Min	0.84	1.21	2.29	2.73	1.90	2.55	1.32	1.08	0.80	0.68	0.59	0.71
(WY)	(2003)	(2003)	(2001)	(2001)	(2005)	(2001)	(2004)	(1995)	(2003)	(2003)	(1994)	(2003)

12113347 MILL CREEK AT EARTHWORKS PARK, AT KENT, WA—Continued**SUMMARY STATISTICS**

	Calendar Year 2006	Water Year 2007	Water Years 1994 - 2007
Annual total	1,663.08	1,535.06	
Annual mean	4.56	4.21	3.86
Highest annual mean			6.32
Lowest annual mean			2.21
Highest daily mean	90 Nov 6	90 Nov 6	124 Nov 14, 2001
Lowest daily mean	0.72 Aug 16	0.63 Aug 13	0.44 Oct 24, 1994
Annual seven-day minimum	0.74 Aug 10	0.73 Aug 3	0.47 Aug 26, 1994
Annual runoff (ac-ft)	3,300	3,040	2,800
Annual runoff (cfsm)	1.83	1.69	1.55
Annual runoff (inches)	24.85	22.93	21.05
10 percent exceeds	12	11	9.2
50 percent exceeds	1.9	2.0	1.8
90 percent exceeds	0.77	0.85	0.76

